

WORKING WITH PUNE KNOWLEDGE CLUSTER

Pune Knowledge Cluster (PKC) Foundation is a not-for-profit organization. PKC is established by the Office of Principal Scientific Adviser (PSA) to the Government of India. The PSA's office aims to provide pragmatic and objective advice to the Prime Minister and cabinet on matters related to science, technology and innovation with a focus on application of science and technology in critical infrastructure, economic and social sectors in partnership with Government departments, institutions and industry.

I approached PKC to demonstrate AI based Student Engagement project. Since PKC is involved in managing 24 schools, we decided to try my technology in the schools so it could benefit the students and teachers in all the schools. I presented my solution to multiple team members as we needed help from the IT department, from Education department and from Capacity planning department.

The discussion was scheduled for 30 mins but the meeting continued for 90 mins. At one point, few PKC team members requested me to find their engagement levels posing as students. Since I have created a mobile app which takes video and image as an input, I was immediately able to demonstrate my technology by processing the image to calculate the engagement levels. I worked very closely with Atharva Pathak, Software Engineer at PKC who helped me to mentor working with schools and other departments.



In addition to Student engagement, I also worked with PKC on the following 2 projects:

1) “Swachha Shala” (Clean Schools): This project was first mentioned by Dr Priya Nagaraj, CEO at PKC. Since this was a Computer Vision project and will help the school students, specifically the girl students, I immediately started working on it. The goal was to decrease the dropout rate of girls from high school as unhygienic bathrooms were directly related to girls’ school attendance, especially during the menstruation cycle.

I developed an app for students to report their bathroom conditions so authorities and PKC can initiate action to maintain the hygiene of schools. Here is the link to the app deployed on PKC Android Play Store -

<https://play.google.com/store/apps/details?id=com.swachhashala>

2) Carbon neutral community: I worked with PKC sustainability department, primarily with Dr Disha Sawant who is leading Citizen Science initiatives at PKC. The goal is to make my residential community carbon-neutral in the next 5 years. I worked with the management committee of our housing community to collect and analyze the data in the format recommended by PKC so we together can work on a plan.